## REMARKS/ARGUMENTS

The Claims have been amended to improve readability and the address the Examiner's concerns.

Support for the amendment of Claim 9, 10 and 14 is found on page 3, line 14. Support for Claim 10 is further found on page 13, lines 5-19.

Claim 16 is canceled without prejudice.

No new matter is believed to have been added by the amendment.

The rejection of Claims 1-18 under 35 U.S.C. §103(a) over Maruoka (US 4,698,102) is respectfully traversed.

Maruoka discloses a method of producing a soft steel backplate (see col. 1, lines 8-10). In order to achieve a soft steel backplate, one of the methods employed by Maruoka is to limit the content of nitrogen to a maximum of 0.01 % since "nitrogen causes the solid-solution hardening in steps prior to annealing and strain-aging hardening in the skin-pass rolling and subsequent steps" (see col. 4, lines 23-27).

Claims 1, 9 and 10 clearly limit the nitrogen content to be between 0.010 and 0.014 % by weight. Applicants submit that the phrase "between 0.010 and 0.014 %" is synonymous with "greater than 0.010 and less than 0.014 %." Even if the phrase is interpreted to be inclusive of 0.010 and 0.014 %, as stated in the M.P.E.P. §2131.03, "prior art touching the claimed range anticipates if the prior art range discloses the claimed range with 'sufficient specificity'." Applicants submit that Maruoka does not disclose the content of nitrogen to be 0.01 % with "sufficient specificity" since the maximum nitrogen content disclosed specifically in the Examples is 0.0084% (see Table 1 in the Examples, col. 7-8). In fact, by disclosing that nitrogen content necessarily be no more than 0.010 % by weight, Maruoka is teaching away from obtaining a steel sheet having the nitrogen content any higher than 0.010 % by weight. Withdrawal of the rejection of Claims 1-18 is requested.

The rejection of Claims 9-18 under 35 U.S.C. §103(a) over Daizo (JP 07034192 or JP 10030152) is respectfully traversed.

Daizo discloses a steel plate which contains 0.01-0.15% carbon, less than 0.05% silicon, less than 0.9% manganese, less than 0.04% phosphorous, less than 0.04% sulfur, 0.015-0.1% aluminum, 0.0020-0.015% nitrogen with the remainder iron and impurities (see Abstract). However, as the Examiner notes in the Official Action, Daizo only discloses that the steel plate is subjected to various processing operations without any specific mention of the various processing limitations disclosed in Claim 9.

Applicants have amply demonstrated that products of varying properties are obtained when process parameters are altered (see Figures 1-8). For example, both the rupture strength and hardness decrease when a slower cooling rate of 50 °C/sec is utilized instead of the claimed 100 °C/sec or greater. Therefore, the claimed processing operation imparted to the steel sheets can and does inevitably lead to special and distinct characteristics in the final product.

However, the Examiner continues to maintain that the product made in the present invention is same or obvious from the sheets of Daizo, despite the Examiner's own admission that the details of method steps are not disclosed (see page 3, line 1 of the Official Action). The Examiner maintains that comparisons must be done under identical condition except for the novel features of the invention. As Daizo apparently does not disclose any specific details of the method steps, and the Applicants have amply disclosed distinct and different products are obtained by the variation of the processing conditions, the "identical condition except for the novel features of the invention" cannot be ascertained from the teachings of Daizo. The disclosure of Daizo is simply too broad to ascertain a set of conditions to compare against the present invention. Therefore, obtaining the steel strip of the present

invention produced with the process steps as defined in Claim 9 could not have been obvious. Withdrawal of the rejection of Claim 9 is requested.

Furthermore, Daizo is silent to the limitation in Claim 10 of percentage elongation A% satisfying the relationship: $(750 - Rm)/16.5 \leq A\% \leq (850 - Rm)/17.5$ wherein Rm is the maximum rupture strength of the steel, expressed in MPa. The Examiner however maintains that "none of the Rm or A has been recited in instant claims" contrary to the limitations set forth in Claim 10.

Applicants further note that the Examiner believes that A% refers to the elongation during rolling operations, which is incorrect (see page 5, last paragraph in the Office Action). Rather, A% refers to the elongation percentage measured in a tensile testing apparatus after the final product has been made, as supported in the specification (see page 13, lines 5-19). Claim 10 has been amended to specifically clarify this point.

The Examiner further states that "there is no invention in the discovery of a general formula if it covers a composition described in the prior art." Applicants submit that the formula is not merely a general formula covering a composition described in the prior art, but a means to specifically distinguish the present invention over the prior art. Namely, it is a means to describe steel sheets having low aluminum content which has a higher percentage elongation (as measured in tensile tests) than the conventional steel sheets having equivalent level of maximum rupture strength (see page 3, lines 5-8 of the specification). For example, Applicants noted that conventional "renitrided low-aluminum" steel with a maximum rupture strength on the order of 550 MPa will have a percentage elongation on the order of only 2 to 5% (see page 3, lines 1-3 in the specification) whereas according to the present invention (formula), percentage elongation of approximately 12 to 17% are possible. Accordingly, Daizo is silent to such improvements in the percentage elongation as claimed by the

Applicant, but rather discloses the elongation ratio of 0.5 – 2.0% during the temper rolling cycle (see Abstract). Withdrawal of the rejection of Claim 10 is requested.

Withdrawal of the rejection of Claims 11-18, which depend on Claim 9 or 10, is also requested.

Applicants submit the application is now in condition for allowance. Early notification of such allowance is earnestly solicited.

Respectfully submitted,

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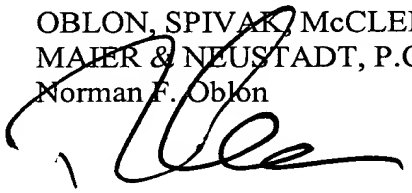

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